

Second Amendment and Response Under 37 C.F.R. 1.116

Applicant: Michael Bauer et al.

Serial No.: 10/789,033

Filed: February 27, 2004

Docket No.: I431.103.101/FIN 423 US

Title: ELECTRONIC COMPONENT AND SEMICONDUCTOR WAFER, AND METHOD FOR PRODUCING THE SAME

IN THE CLAIMS

Please cancel claims 1-3.

Please amend claims 4 and 5 as follows:

1.-3. (Cancelled)

4. (Currently Amended) A semiconductor wafer having a top side and a rear side, the semiconductor wafer comprising:
integrated circuits for semiconductor chips arranged in rows and columns on its wafer top side;
strip-type separating regions arranged between the integrated circuits of the semiconductor chips; and
wherein the separating regions have passage contacts in the direction of the rear side of the semiconductor wafer, the passage contacts having perforations with walls having a metal layer applied thereto and;~~The semiconductor wafer of claim 3,~~
wherein the walls also have an insulation layer applied thereto.

5. (Currently Amended) A semiconductor wafer having a top side and a rear side, the semiconductor wafer comprising:
integrated circuits for semiconductor chips arranged in rows and columns on its wafer top side;
strip-type separating regions arranged between the integrated circuits of the semiconductor chips; and
wherein the separating regions have passage contacts in the direction of the rear side of the semiconductor wafer;~~The semiconductor wafer of claim 1,~~
wherein the passage contacts have fusible solder material.

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6. (Previously Presented) A semiconductor chip with a top side, a rear side, and with edge sides, the semiconductor chip comprising:
- an integrated circuit on the top side;
 - at least one edge side having edge contacts wherein, the edge contacts extend from the top side in the direction of the rear side of the semiconductor chip; and
 - wherein the edge contacts are connected to electrodes of the integrated circuit via conductor tracks located on the top surface of the semiconductor chip.
7. (Previously Presented) The semiconductor chip of claim 6, wherein the edge sides have a perforation-like structure, semicylinder-like cutouts extending as edge contacts from the top side in the direction of the rear side, and have a metal layer.
8. (Original) The semiconductor chip of claim 7, wherein the edge sides also have an insulation layer.
9. (Original) The semiconductor chip of claim 7, wherein the cutouts have a soldering material.
10. (Original) The semiconductor chip of claim 7, wherein the edge contacts are extended on the top side to form a contact area and merge with a conductor track on the top side.
11. (Original) The semiconductor chip of claim 7 arranged on a circuit substrate within an electronic component.
12. (Original) The semiconductor chip of claim 11, wherein the circuit substrate has a top side and a conductor track structure, the semiconductor chip being arranged with its rear side on the top side of the circuit substrate and the edge contacts being electrically connected to the conductor track structure via contact pads on the top side of the circuit substrate.

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13. (Original) The semiconductor chip of claim 12, wherein an insulating plastics composition is arranged on the circuit substrate in a manner embedding the edge sides of the semiconductor chip and the contact paths.

14. (Original) The semiconductor chip of claim 12, wherein the semiconductor chip is arranged with an edge side on the circuit substrate, the top side of the semiconductor chip being arranged in angular fashion with respect to the top side of the circuit substrate and the edge contacts being electrically connected to the contact pads.

15. (Original) The semiconductor chip of claim 11, wherein a plurality of additional semiconductor chips are stacked one on the other and are electrically connected via the edge contacts among one another and also with respect to external contacts.

16. (Cancelled)

17. (Cancelled)